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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/595,162	06/15/2000	RICHARD H BREINLINGER	SAA-31	2788

23569 7590 07/29/2004

SQUARE D COMPANY
INTELLECTUAL PROPERTY DEPARTMENT
1415 SOUTH ROSELLE ROAD
PALATINE, IL 60067

EXAMINER

TRAN, PHUC H

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 07/29/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/595,162

Applicant(s)

BREINLINGER, RICHARD H

Examiner

PHUC H TRAN

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claims 2-3, 15-16, and 26-27 are objected to because of the following informalities: "CAN" and "CANopen" need to rewrite as Controller Area Network. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanf (U.S. Patent No. 6115831) in view of Walker et al. (U.S. Patent No. 6260073 B1).

- With respect to claims 1, 6, 14, & 25, Hanf teaches communication network having a bus (bus in Fig. 4) and at least one device (device in Fig. 4 & 5), the communication network comprising:

a switch operably connected to the bus and the at least one device, the switch being responsive to the bus to generate a terminate enable (block S in Fig. 3);

a connector operably connecting the at least one device to the bus (connector 8, 9 in Fig. 3);

and, a terminal resistor operably connected to the switch, wherein the switch inserts the terminal resistor onto the bus in response to the terminate enable (registers 16, 17 in Fig. 3).

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Hanf fails to teach the bus is Ethernet. Walker teaches the bus is the Ethernet (block 204 in Fig. 3) for faster transmitting. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement the Ethernet into Hanf for faster communication in the bus system.

- With respect to claims 2-3, 15-16, & 26-27, Hanf discloses wherein the network is CAN (col. 1, line 14-15).

- With respect to claims 4-5, Hanf teaches wherein the bus is a serial type bus e.g. Fig 9-10 col. 20, lines 12.

- With respect to claims 7-8,10-12, 17-18,20-22, 28-29, & 32, Hanf fails to disclose wherein the bus is Ethernet, 10Base-2, 10Base-5, ModbusPlus, Arcnet, RS485. Walker discloses the bus is Ethernet, Arcnet, RS485 (col. 1, lines 57-67) for faster transmission. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement the Ethernet into Hanf for faster communication in the bus system.

- With respect to claims 9, 19, & 31, Hanf discloses wherein the bus supports CAN communication (e.g. the bus in Fig. 9-10).

- With respect to claims 13 & 23, Hanf teaches wherein the value of the terminal resistor is equal to the value of the characteristic impedance of the network (col. 10, lines 46-64).

- With respect to claims 24, & 30, Hanf teaches wherein the value of terminal resistor selected is 120 ohms (col. 10, lines 30-45).

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Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See form PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H TRAN whose telephone number is (703) 308-7471. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RAO SEEMA can be reached on (703) 308-5463. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuc Tran
Assistant Examiner
Art Unit 2664

P.t
7/24/04



DANG TON
PRIMARY EXAMINER